Department of Transportation
Project No. 142-148
Rehabilitation of Bridge No. 00840
Route 74 over I-84, Town of Tolland

Public Information Meeting Held at
Hicks Memorial Municipal Center (Town Hall)
21 Tolland Green
Tolland, CT

April 18, 2011

Minutes

Present:

Connecticut Department of Transportation

Scott A. Hill - Manager of State Design
Joseph C. Cancelliere - Transportation Principal Engineer- Bridge Design
Andrew J. Cardinali - Bridge Design
Ken-Taro Plude - Bridge Design
Stephen P. Curley - Traffic Engineering
Dilraj S. Josen – Office of Construction

Town of Tolland

Jennifer Usher - Town Engineer

Presentation:

The meeting began at 6:30 p.m. with an open house question and answer format. Colored plans were displayed and brochures were handed out. Approximately nine residents attended. Also, present was State Representative Bryan Hurlburt, 53rd District.

Mr. Joseph Cancelliere opened the presentation at 7:00 p.m. with an overview of the project location and why the DOT initiated this project. Mr. Andrew Cardinali followed Mr. Cancelliere with a power point presentation that included photos documenting the existing conditions of the deck, steel girder paint, and expansion bearings, in addition to plans showing the proposed construction staging sequences. The information below summarizes the presentation.

The purpose of this project is to rehabilitate Bridge No. 00840, which carries Route 74 over Interstate 84 in the Town of Tolland (Town). This structure is a two-span continuous girder bridge built in 1952. Each span is approximately 105' in length giving the bridge a total length of approximately 210'.

This project was initiated mainly due to the poor condition of the concrete deck. Concrete samples of the deck revealed that it contains a high amount of chloride ions. This is a serious condition because the chloride ion accelerates the corrosion of the rebar, which results in rust build-up and eventually causes cracking of the concrete increasing exposure to more chloride ions and ultimately breaking the bond between the concrete and the reinforcing steel resulting in loss of structural capacity.

This project will also address replacement of the existing expansion bearings and the complete abrasive sand blasting and painting of the existing steel. Lastly, protective fencing will be installed on top of the new parapet walls to prevent obstacles from being thrown down on traffic below.

The project will be constructed in two major stages. Each stage will maintain one lane of traffic in alternating directions with temporary signal control on each approach to the bridge. The temporary signals will be activated by a microwave detection system for normal traffic, with an Emergency Vehicle Preemption System.

Stage I construction will address the southern portion of the deck and parapet reconstruction as well as the existing expansion bearings. Stage 2 construction will address the northern portion of the deck and parapet reconstruction and bearing replacement. The final proposed section will have a 1'-10" parapet, an 8'-0" shoulder and a 12'-0" lane in each direction.

The project is scheduled to start construction in spring 2012 and the anticipated date of completion is fall 2013. The first year of construction will consist of replacing the bridge deck, replacing the expansion bearings and installing the 6'-0" high protective fence. At the end of 2012, all construction on top of the bridge will be completed and the bridge will return to normal traffic operations. The second year of construction will consist of painting the steel girders. This work will have no impact on Route 74 traffic.

The estimated construction cost of this project will be $1 – $2 million and funding will be 100% state funds.

Public Comments and Questions:

1. How long will the construction on Grape Vine Brook last (an adjacent project on Route 74)?
Response: The construction of Grape Vine Brook is expected to end this year.

2. Is installing a 6'-0" high protective fence a statuary requirement?
Response: Because of past incidents of objects being thrown from bridges, it is the Department's policy to install a protective fence when we do rehabilitation work on a bridge carrying traffic over an interstate highway.

3. Residents and Representative Hurlburt expressed their concerns with having three construction projects in a five-year window within a half mile zone. How will this project coincide with the proposed project on Route 74 over the Willimantic River in Willington, and are you coordinating the two projects?
Response: So far there has been no coordination between this project and the proposed project (160-139) on Route 74 over the Willimantic River in Willington. The Route 74 Willington project has an expected start of construction date of 2013. Based on the time schedule for the rehabilitation of Bridge No. 00840, we expect that the deck replacement will be completed, and all lanes on the bridge will be open by the end of 2012. Therefore, there should be no conflict between this project and the project on Route 74 in Willington.

4. What type of traffic impact such as delays do you expect?
Response: We will be installing temporary signals at each end of the bridge. It will take a little longer to get through the bridge due to the alternating one-way. However, based on the traffic volumes on this road, we do not expect any excessive traffic backups.

5. What safety measures will be in place to protect the travelling public during construction?
Response: The main safety feature in place will be the Temporary Precast Concrete Barrier (TPCB). The TPCB will separate the construction zone from the alternating one-way traffic and prevent any cars from entering the construction zone.

6. In the presentation you said that the bridge was built in the 1952, but hasn't the bridge been replaced in the 1970's?

Response: No, this bridge was constructed with Interstate 84. There has been a couple of modifications to the structure since then (abutment modifications and parapet modifications) but the deck is an original component of the structure.

7. Any concerns with section loss of the steel beams?

Response: The latest inspection report states that the steel girders are in good condition with no loss of section.

8. Where are the temporary traffic signals going to be located?

Response: The temporary traffic signals will be located just off the bridge as to minimize the length of the construction zone. However, there will be sufficient distance between the stop bars and the signals at the I-84 ramps to allow queuing of vehicles without back-ups onto the ramps.

9. A resident brought up a concern about traffic coming off Exit 69 from I-84 eastbound and turning left onto Route 74 towards Bridge No. 00840. He has seen many near accidents in this area and is concerned the alternating one-way traffic may cause more problems. He has asked if it was possible to install a temporary traffic signal at the exit ramp.

Response: If the temporary signal was moved to the ramp intersection, this would add excessive timing to the signal to allow vehicles travel the distance from the ramp to the bridge, plus the timing necessary to travel through the construction zone. That excessive signal timing would then cause backups on the west side of the bridge.

Adjournment:

The meeting was adjourned at approximately 8:00 p.m.